

### ABSTRACT

A beverage dispensing system includes a cooling chamber filled with a bath of cooling fluid for cooling beverage fluids. A cooling unit, including an evaporator coil extending from the cooling unit into the cooling chamber, freezes the cooling fluid into a frozen cooling bank about the evaporator coil. Sensor units positioned at desired locations about the evaporator coil provide output corresponding to the size and shape of the frozen cooling bank. Also, a control unit reads the output from the sensor units and operates the cooling unit to regulate the growth of the frozen cooling bank. In addition, the control unit may read output from temperature sensors attached to dispensing valves or monitoring ambient temperature conditions.